What is claimed is:

1. A mold assembly comprising:

a mold base;

a mold frame slidingly received on said mold base, said mold base and said mold frame defining a mold cavity;

a plurality of springs disposed between said mold base and said mold frame;

a mold cover engaging said mold frame, said mold cover closing said mold cavity, said mold cavity having a variable volume due to said mold frame sliding with respect to said mold base.

2. The mold assembly according to Claim 1 wherein said plurality of springs are conical springs.

3. The mold assembly according to Claim 1 wherein said mold base comprises a support structure and a platform, said mold frame being slidingly received on said platform.

4. The mold assembly according to Claim 3 wherein said plurality of springs are disposed between said support structure and said mold frame.

5. The mold assembly according to Claim 3 wherein said platform defines a first height and said mold frame defines a second height, said first height being greater than said second height such that a sliding movement of said mold frame with respect to said platform ejects a molded article.

6. The mold assembly according to Claim 5 wherein said plurality of springs are conical springs.

7. A method of producing a sheet of brake lining material in a mold having a mold base and a mold frame, said method comprising the steps of:

placing a pre-specified amount of brake lining material within a mold cavity having a volume defined by said mold base and said mold frame;

forming said pre-specified volume of brake lining material within said mold cavity such that said brake lining material fills said cavity;

adjusting said volume of said mold cavity to equal said volume of said pre-specified amount of brake lining material to produce said sheet of brake lining material.

8. The method according to Claim 7 wherein said mold cavity defines a height and said step of adjusting said volume adjusts said height of said mold.

9. The method according to Claim 7 wherein said step of adjusting said volume moves said mold frame with respect to said mold base.

10. The method according to Claim 7 further comprising the step of ejecting said sheet of brake lining material from said mold cavity.

11. The method according to Claim 10 wherein said step of ejecting said sheet of brake lining material moves said mold frame with respect to said mold base.